

What is claimed is:

1. A radio network controller for controlling a radio base station device for making a communication with a movable terminal through a radio link, comprising:

5 a block for controlling said radio base station device, said block being physically divided into two subblocks, wherein a control dependent on a particular radio transmission scheme is performed only in one of said two subblocks.

2. A radio network controller for controlling a radio base station device for making a communication with a movable terminal through a radio link, comprising:

5 first control means for performing a control independent of any radio transmission scheme; and

second control means physically separated from first control means for performing a control dependent on a particular radio transmission scheme.

3. A radio network controller comprising:

first control means for controlling a radio base station device for making a communication with a movable terminal through a radio link, and for controlling a transfer of a control signal or signalling; and

5 second control means physically separated from said first control means for controlling a transfer of user data associated with said terminal,

said second control means having a radio transmission scheme dependent control function.

4. A radio network controller for controlling a radio base station device for making a communication with a movable terminal through a radio link, comprising:

5 first control means for performing a control related to terminal resources for said terminal; and

second control means physically separated from said first control means for performing a control related to base station resources for said radio base station device.

5. A radio network controller according to claim 2, wherein:

said first control means comprises at least:

common radio resource managing means for managing a radio access network environment to optimize a network load; and

5 mobile controller for establishing and releasing a communication channel, and

said second control means comprises at least:

10 cell controller for controlling a permission to a radio access to each radio base station device, as well as congestion and assignment of said each radio base station device;

cell communication gateway for transmitting individual radio channel signals and multiplexing/demultiplexing common radio channel signals; and

15 a user radio gateway for performing encryption and decryption of  
radio channels, compression of a header, multiplexing/demultiplexing, and a  
retransmission control.

6. A radio network controller according to claim 3, wherein:

said first control means comprises at least:

common radio resource managing means for managing a radio  
access network environment to optimize a network load; and

5 mobile controller for establishing and releasing a communication  
channel, and

said second control means comprises at least:

cell controller for controlling a permission to a radio access to  
each radio base station device, as well as congestion and assignment of  
10 said each radio base station device;

cell communication gateway for transmitting individual radio  
channel signals and multiplexing/demultiplexing common radio channel  
signals; and

15 a user radio gateway for performing encryption and decryption of  
radio channels, compression of a header, multiplexing/demultiplexing, and a  
retransmission control.

7. A radio network controller according to claim 4, wherein:

said first control means comprises at least:

common radio resource managing means for managing a radio  
access network environment to optimize a network load; and

5 mobile controller for establishing and releasing a communication  
channel, and  
said second control means comprises at least:  
cell controller for controlling a permission to a radio access to  
each radio base station device, as well as congestion and assignment of  
10 said each radio base station device;  
cell communication gateway for transmitting individual radio  
channel signals and multiplexing/demultiplexing common radio channel  
signals; and  
a user radio gateway for performing encryption and decryption of  
15 radio channels, compression of a header, multiplexing/demultiplexing, and a  
retransmission control.

8. A mobile communication system comprising at least:  
movable terminal;  
radio base station device for making a communication with said  
terminal through a radio link; and

5 radio network controller for controlling said radio base station  
device, wherein said radio network controller has a block for controlling said  
radio base station device, said block being physically separated into two  
subblocks, such that a control dependent on a particular radio transmission  
scheme is performed only in one of said two subblocks.

9. A mobile communication system comprising at least:  
movable terminal;

radio base station device for making a communication with said terminal through a radio link; and

5 radio network controller for controlling said radio base station device, wherein said radio network controller is physically separated into first control means for performing a control independent of any radio transmission scheme, and second control means for performing a control dependent on a particular radio transmission scheme.

10. A mobile communication system comprising at least:

movable terminal;

radio base station device for making a communication with said terminal through a radio link; and

5 radio network controller for controlling said radio base station device,

wherein said radio network controller comprises first control means for controlling a transfer of user data associated with said terminal, and second control means physically separated from said first control means

10 for controlling a transfer of a control signal or signalling, said second control means having a radio transmission scheme dependent control function.

11. A mobile communication system comprising at least:

movable terminal;

radio base station device for making a communication with said terminal through a radio link; and

5 radio network controller for controlling said radio base station

device,

wherein said radio network controller comprises:

first control means for performing a control related to terminal resources for said terminal; and

10                   second control means physically separated from said first control means, for performing a control related to base station resources for said radio base station device.

12.           A mobile communication system according to claim 9, wherein:

said first control means comprises at least:

common radio resource managing means for managing a radio access network environment to optimize a network load; and

5                   mobile controller for establishing and releasing a communication channel, and

said second control means comprises at least:

cell controller for controlling a permission to a radio access to each radio base station device, as well as congestion and assignment of  
10                   said each radio base station device;

cell communication gateway for transmitting individual radio channel signals and multiplexing/demultiplexing common radio channel signals; and

15                   user radio gateway for performing encryption and decryption of radio channels, compression of a header, multiplexing/demultiplexing, and a retransmission control.

13. A mobile communication system according to claim 10, wherein:  
said first control means comprises at least:

common radio resource managing means for managing a radio  
access network environment to optimize a network load; and

5 mobile controller for establishing and releasing a communication  
channel, and

said second control means comprises at least:

cell controller for controlling a permission to a radio access to  
each radio base station device, as well as congestion and assignment of

10 said each radio base station device;

cell communication gateway for transmitting individual radio  
channel signals and multiplexing/demultiplexing common radio channel  
signals; and

15 user radio gateway for performing encryption and decryption of  
radio channels, compression of a header, multiplexing/demultiplexing, and a  
retransmission control.

14. A mobile communication system according to claim 11, wherein:  
said first control means comprises at least:

common radio resource managing means for managing a radio  
access network environment to optimize a network load; and

5 mobile controller for establishing and releasing a communication  
channel, and

said second control means comprises at least:

cell controller for controlling a permission to a radio access to

each radio base station device, as well as congestion and assignment of  
10 said each radio base station device;

cell communication gateway for transmitting individual radio  
channel signals and multiplexing/demultiplexing common radio channel  
signals; and

user radio gateway for performing encryption and decryption of  
15 radio channels, compression of a header, multiplexing/demultiplexing, and a  
retransmission control.

15. A method of controlling a radio base station device in a radio  
network controller, said method comprising the steps of:

physically separating a block for controlling said radio base station  
device into two subblocks; and

5 performing a control dependent on a particular radio transmission  
scheme only in one of said two subblocks.

16. A method of controlling a radio base station device in a radio  
network controller, said method comprising the steps of:

controlling said radio base station device independently of any  
radio transmission scheme in first control means; and

5 controlling said radio base station device depending on particular  
radio transmission scheme in second control means physically separated  
from said first control means.

17. A method of controlling a radio base station device in a radio



network controller, said radio network controller having first control means for controlling a transfer of a control signal or signalling, and second control means physically separated from said first control means for controlling a transfer of user data related to a movable terminal, said method comprising  
5 the step of:

performing a control dependent on a particular radio transmission scheme only in said second control means.

18. A method of controlling a radio base station device in a radio network controller, comprising the steps of:

performing a control related to terminal resources for said terminal in first control means; and

5 performing a control related to base station resources for said radio base station device in second control means physically separated from first control means.

19. A method of controlling said radio base station device in a mobile communication system having at least a movable terminal, said radio base station device for making a communication with said terminal through a radio link, and a radio network controller for controlling said radio base station

5 device, said method comprising the steps of:

physically separating a block for controlling said radio base station device in said radio network controller into two subblocks; and

performing a control dependent on a particular radio transmission scheme only in one of said two subblocks.

20. A method of controlling said radio base station device in a mobile communication system having at least a movable terminal, a radio base station device for making a communication with said terminal through a radio link, and a radio network controller for controlling said radio base station device, comprising the steps of:

controlling said radio base station device independently of any radio transmission scheme in first control means provided in said radio network controller; and

controlling said radio base station device depending on a particular radio transmission scheme in second control means provided in said radio network controller and physically separated from said first control means.

21. A method of controlling said radio base station device in a mobile communication system having a radio network controller including first control means for controlling a transfer of a control signal or signalling, and second control means for controlling a transfer of user data related to a movable terminal, said radio network controller being configured to control a radio base station device for making a communication with said terminal through a radio link, comprising the step of:

performing a control dependent on a particular radio transmission scheme only in said second control means.

22. A method of controlling said radio base station device in a mobile

communication system having at least a movable terminal, said radio base station device for making a communication with said terminal through a radio link, and a radio network controller for controlling said radio base station

5 device, comprising the steps of:

performing a control related to terminal resources for said terminal in first control means provided in said radio network controller; and

performing a control related to base station resources for said radio base station device in second control means provided in said radio  
10 network controller and physically separated from first control means.